

ARKDALE LAKE MANAGEMENT PLAN			
AQUATIC SPECIES MANAGEMENT	Page 29		
<u>GOALS and ACTION ITEMS</u>	<u>WHO</u>	<u>WHEN</u>	<u>FINANCE</u>
<u>Goal A: Revise aquatic plant management plan to improve aquatic ecosystem, including controlling current invasive species (EWM & CLP) and preventing introduction of other exotic using an integrated approach.</u>			
1. Continue volunteer monitoring group monitor aquatic plant growth at least monthly during growth season to identify any areas of especially dense growth that will interfere with recreational activities or habitat & any aquatic invasives.	Arkdale Lake Association Adams LWCD	ongoing	time & county staff
2. Apply for permit to mechanically harvest navigational channel from boat ramp area through the narrows at least every 3 weeks to keep narrows open and to reduce potential spread of EWM, which is located directly around the boat ramp and would be fragmented by boat traffic going through it. This application will include a map specifically identifying the areas to be mechanically harvested.	Arkdale Lake Association Adams LWCD WDNR	ongoing	time state & county staff
3. Carry out mechanical harvesting per plan in permit.	Arkdale Lake Association	ongoing	ALA
4. Annually develop harvest map no later than December of the prior year to allow the harvesting map to be attached to a permit application.	ALA Adams LWCD, WDNR	annually	time & county staff
5. Annually conduct mapping of Eurasian Watermilfoil plants. Conduct monthly hand-pulling events between May and August of isolated colonies or plants.	ALA Adams LWCD, WDNR	ongoing	PLD county & state staff
6. Integrate these activities into an aquatic species management plan that uses various control methods.	ALA Adams LWCD, WDNR	ongoing	PLD county staff
7. Conduct updated aquatic plant survey by 2010 and every 4 to 5 years thereafter, comparing the results to prior surveys, including the one completed by Adams County LWCD in 2005.	Arkdale Lake Association Adams LWCD, WDNR	2010	county staff

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8. Inventory lake for existence of native weevils that weaken EWM growth.	ArkdaleLake Association		ALA
	Adams LWCD, WDNR	2009	county staff
9. Adams County LWCD will develop an informational packet for lake property owners & lake users about invasive species and preventing their spread, then provide the packet to the Arkdale Lake Association for distribution.	Adams County LWCD	2009	county staff
	Arkdale Lake Association		ALA

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FISHERY AND WILDLIFE MANAGEMENT			
<u>GOALS and ACTION ITEMS</u>	<u>WHO</u>	<u>WHEN</u>	<u>FINANCE</u>
<u>Goal A: Improve fishery habitat & population in Arkdale Lake.</u>			
1. Conduct evaluation of existing fish habitat to determine if habitat improvement and/or fish stocking is necessary for healthy sport fishery.	Arkdale Lake Association WDNR, Adams LWCD	2009-2010	WDNR staff
2. Work with Adams County LWCD & WDNR for plan & permits to reduce rusty crayfish population & restore native plants in areas already denuded.	Arkdale Lake Association Adams LWCD, WDNR	ongoing	state & county staff
3. Maintain predator fish population by requesting a fish-size limit from the WDNR.	Arkdale Lake Association WDNR	ongoing	ALA WDNR
RECREATIONAL MANAGEMENT			
<u>Goal A: Maintain recreational opportunities while maintaining peace and solitude and preserving safety of lake users.</u>			
1. Maintain no-wake rule on the lake.	Arkdale Lake Association Town of Strong's Prairie	ongoing	town & ALA time
2. Request compliance with slow no-wake ordinance and watercraft distance rules by signs, publications and community events.	Arkdale Lake Association residents	2008-2011	time only
3. Work with Strong's Prairie to install erosion controls in boat ramp area and to post no-parking signs in some areas at ramp to allow for turn-around and safe entry & exit.	Arkdale Lake Association Adams County Parks	2008	time Parks staff
4. Investigate cost of products that would assist in keeping boat ramp area from silting in, thus making boat access easier & safer.	Arkdale Lake Association Adams LWCD, WDNR	2009	time

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OTHER MANAGEMENT ISSUES	Page 34		
<u>GOALS and ACTION ITEMS</u>	<u>WHO</u>	<u>WHEN</u>	<u>FINANCE</u>
Goal A: Protect sensitive/critical habita areas for their habitat value to Arkdale Lake.			
1. Provide education on the location and importance of the critical habitat areas on Arkdale Lake through handouts, meetings and on-lake demonstration.	ArkdaleLake Association Adams County LWCD	ongoing	time county staff
<u>Goal A:</u> Encourage diversity of wildlife around lake & incorporate public use.			
			time
1. Conduct survey of lake users & owners to determine if they would like to encourage particular types of wildlife, including songbirds & waterbirds; determine what they value most about Arkdale Lake; determine what they believe are the main negatives and positives about Arkdale Lake.	ArkdaleLake Association Adams County LWCD	2009	county staff
2. Obtain funding & install practices to encourage the desired wildlife, including buffers.	Arkdale Lake Association	2009-2011	grant?
3. Incorporate results into the lake management plan.	Arkdale Lake Association	2009-2011	time only

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EDUCATION			
<u>GOALS and ACTION ITEMS</u>	<u>WHO</u>	<u>WHEN</u>	<u>FINANCE</u>
Goal A: Educate community and public about lake management concerns.			
1. Establish community events to encourage & educate the community about lake conservation practices, as well as recruit volunteers for various lake projects.	Arkdale Lake Association Adams LWCD	ongoing	time county staff
2. Set up & maintain website for posting lake association information & educational information. Paper copies will be provided for those with no computer access.	Arkdale Lake Association	ongoing	time only
3. Place informational kiosks at all public access sites and at the Old Mill about actions citizens can take to improve/maintain water quality & other lake issues & maintain exotic species signs at public accesses.	Arkdale Lake Association Adams LWCD, WDNR	2009	time info from county & state
4. Implement education of lake users, lakefront owners & watershed community on identification & control of exotic species by publication & website information and involvement in Clean Boats, Clean Waters.	Adams LWCD, WDNR Arkdale Lake Association	ongoing	time county staff
5. Develop & distribute an informational packet regarding lake issues, water quality & best management practices to watershed citizens & businesses, including yard care, soil testing & funding.	Adams LWCD Arkdale Lake Association	2009	time county staff
6. Request that lakefront property owners not to use fertilizers or chemicals within 200' of the water. Recommend that they perform soil tests on lawns prior to use of any fertilizer. If fertilizer is called for, only the recommended amount should be used, or a no-phosphorus fertilizer.	Arkdale Lake Association Lake Alliance Adams LWCD, WDNR	ongoing	time only landowners
7. Distribute information on hand-harvesting of aquatic plants of not more the 30' wide corridor (for each 100' of shoreline) for access & viewing on lakefront properties to encourage landowners to limit clearing nearshore water areas.	Arkdale Lake Association Adams LWCD, WDNR	2009	time info from county & state
8. Provide education regarding aging septic systems and related waste issues.	Adams LWCD Arkdale Lake Association	ongoing	time county info

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WATER QUALITY			
<u>GOALS and ACTION ITEMS</u>	<u>WHO</u>	<u>WHEN</u>	<u>FINANCE</u>
<u>Goal A: Maintain & improve present water quality & prevent algal blooms.</u>			
1. Establish and identify in-lake water quality goals with measurable targets for determining progress in protecting the lake, using the information presented in the Adams County Lake Classification Report due out in 2008.	Arkdale Lake Association Adams LWCD	2009	time only
2. Continue using volunteers for monitoring of lake water quality with participation in the DNR Citizen Monitoring Program, with monitoring results being compared to 2004-2006 water quality data collected by Adams County LWCD.	Adams LWCD, WDNR Arkdale Lake Association	ongoing	time WDNR Monitoring
3. Protect water quality, undeveloped property and critical habitat areas by investigating purchase of permanent conservation easements and applying for. WDNR funding to assist in such purchases. If funds are obtained, purchase easements/development rights to prevent degradation of shore & water quality.	Adams LWCD, WDNR Arkdale Lake Association	2010-2012	time county staff grant?
4. Set up study protocol and parameters to investigate impact of septic systems and spring locations on lake water quality.	Adams LWCD, WDNR Arkdale Lake Association Adams County P & Z	2008	time grant? county staff
<u>Goal B: Restore natural shore conditions in riparian areas & incorporate stormwater runoff protection to reduce erosion in and around Arkdale Lake.</u>			
1. Inventory & recruit at least 3 lake front property owners for shore protection & runoff control installation. Habitat may include plantings for Karner Blue Butterfly.	Adams LWCD Arkdale Lake Association	2008-2011	time county staff
2. Design & install at least 5 pilot shore & runoff protection demonstration sites over the next 3 years.	WDNR, Adams LWCD Arkdale Lake Association	2008-2011	county staff landowners
3. Provide funding to landowners to assist in installation of shore protection, erosion control & stormwater runoff management.	WDNR, Adams LWCD Arkdale Lake Association	2009-2010	DATCP or WDNR grant
4. Restore original stream meanders to improve filtering quality and habitat.	Adams LWCD WDNR, Adams LWCD	2011-2012	time county staff grant?

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Goal C: Implement goose control plan to reduce nutrient input into lake by goose waste.				
1. Develop & implement plan for goose control around the lake.		U.S. Fish & Wildlife Adams LWCD Arkdale Lake Association	2010	fed & state govt time
Goal D: Develop stream monitoring program for area between Big Roche a Cri Lake and Arkdale Lake.				
1. Develop and train group of volunteers to monitor water quality of streams.		Adams LWCD Arkdale Lake Association	ongoing	time county staff
2. Set up schedule for volunteers to continue monitoring stream.		Adams LWCD Arkdale Lake Association	ongoing	time county staff
Goal E: Develop & implement plan for management of rusty crayfish.				
1. Meet with WDNR and Adams County LWCD to develop plan for management of rusty crayfish.		Adams LWCD, WDNR Arkdale Lake Association	2008	time state & county staff
2. Plan must include steps to restore native aquatic vegetation where it has been reduced or removed by the rusty crayfish.		Adams LWCD, WDNR Arkdale Lake Association	2008	time state & county staff
3. Apply for grant from WDNR to implement plan for management of rusty crayfish.		Arkdale Lake Association	2009-2010	grant?
WATER QUANTITY				
Goal A: Determine ways to increase depth of lake in navigational channels and implement plan to do so.				
1. Investigate options for deepening lake in navigational channels to promote water quality, water quantity and water safety.		Adams LWCD Arkdale Lake Association	ongoing	time
2. If options are financially feasible, develop plan for deepening channels and apply for grant from WDNR to assist in costs. The plan may also include restoring some of the upstream meanders and installing a sediment basin to reduce sediment coming into Arkdale Lake.		Adams LWCD, WDNR Arkdale Lake Association	ongoing	grant? county staff

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DAM MANAGEMENT			
<u>GOALS and ACTION ITEMS</u>	<u>WHO</u>	<u>WHEN</u>	<u>FINANCE</u>
Goal A: Maintain & operate Arkdale Dam to insure public safety, proper dam function, and stable lake level.			
1. Conduct annual inspections and record findings as required by WDNR standards.	Arkdale Lake Association professional engineer	annually	ALA
2. Hire firm to perform dam break analysis.	Arkdale Lake Association	2010	ALA
3. Develop Emergency Action Plan.	Arkdale Lake Association Adams LWCD	2011	time & county staff
4. Operate, inspect & repair dam to meet Wisconsin laws in Chapter 31 and NR Chapter 330.	Arkdale Lake Association	annually	time
5. Implement plan to set aside an amount each year to be reserved for required repairs.	Arkdale Lake Association	annually	time

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OUTSIDE THE SHORELAND AREA			
Goal A: Reduce nutrients entering lake from watershed.			
1. Implement State Agricultural Performance Standards by inventorying watershed and documenting: runoff from livestock confinement operations entering surface waters; livestock direct access sites; uncontained livestock manure storage facilities; soil erosion sites, and producers not implementing nutrient management plans and irrigation water management plans.	Adams LWCD, NRCS DNR, Agric. Producers private organizations	2011 to 2012	county & state staff
2. Develop working partnership with the county, town & state highway departments to decrease runoff from roads that are currently ending up in the lake by installing runoff and erosion control practices.	Arkdale Lake Association Adams LWCD Town of S. Prairie Adams County Hghway	2009-2012	time town, county & state staff
3. Perform specific stormwater assessment on residential properties, including shore properties, and other development to determine methods to manage stormwater runoff.	Arkdale Lake Association Adams LWCD	2009-2012	landowners county & staff
4. Work with Big Roche a Cri Watershed Advisory Group, Big Roche a Cri Lake District and Adams County to develop an integrated plan for reducing input into Arkdale Lake from Big Roche a Cri Lake.	Arkdale Lake Association Adams LWCD Big Roche a Cri Lake District Watershed Advisory Group	2009-2012	time from ALA county & BRC Lake District